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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/697,567  
Filing Date: October 31, 2003  
Appellant(s): GRAFENAUER, THOMAS

**MAILED**

OCT 10 2007

**GROUP 3600**

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Andrew M. Calderon  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 08/14/2007 appealing from the Office action mailed 03/30/2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1, 3-7, 9, 12, 13.

Claims 2, 8, 10-11 have been canceled.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

WO 01/75247

Palsson

10-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-7, 9 and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Palsson (WO 01/75247).

Regarding claim 1: Palsson discloses a floor panel which is bounded in a horizontal plane by a top side having a decorative layer (3) and an underside for bearing on an underlying surface (5), the floor panel being provided with means for releasably connecting at least two panels, wherein the connecting means are formed on at least one first side edge such that locking takes place in a transverse direction and a vertical direction (sides 2 and 2'' with elements 11 and 13), and further comprising form-fitting elements for locking in a vertical direction with a further panel (bottom paragraph of page 7 – top of page 8) formed on a second side edge (2''') running at an angle to the first side edge, wherein the form-fitting elements are spaced apart from one another in the vertical direction and the transverse direction (figures 5, 6, or 7) on two spaced-apart, essentially vertically oriented walls, and further comprising a tongue (11) on a first side edge (2) extending in the longitudinal direction of the first side edge, and a recess (13) corresponding to the tongue formed on an opposite side edge (2''), wherein an

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underside of the tongue, starting from a tip of the tongue, has a continuously curved contour and wherein a radius of curvature of the contour of the underside of the tongue is constant over at least 90 degrees (figure 1).

Regarding claims 3: The floor panel according to claims 1, wherein the recess is designed as a groove with a top lip (figure 1) and a bottom lip (14), in which the tongue can be latched in the transverse direction.

Regarding claim 4: The floor panel according to claim 1, further comprising a first step-like milled relief (on edge 2''' of figure 5) formed on the second side edge and starting from the underside, wherein the first step-like milled relief includes an inner wall (21) on which one said form-fitting element (21) extending in the transverse direction is arranged and an outer wall (opposite 21 generally at 23) on which another said form-fitting element extending in the transverse direction is arranged (23), and further comprising a second step-like milled relief (2<sup>IV</sup>) formed on a side edge that is located opposite the second side edge, wherein the second step-like milled relief starts from the top side and has an other inner wall (at 24) and an other outer wall (22), on which are formed undercuts (24) which correspond with the one and the other form-fitting elements (where 24 correspond with 23 and 22 corresponds with 21), wherein the first step-like milled relief forms a shoulder which projects in a direction of the underside and has an essentially horizontally oriented head surface (figure 5), and further comprising a channel formed in the head surface along a longitudinal extent in relation to the second side edge (figure 5, where the channel is between 22 and the main body of the panel).

Regarding claim 5: Palsson discloses a floor panel comprising:

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a top side (3);

an underside for bearing on an underlying surface (5);

a first side edge (2), having a tongue (11) and an opposite side edge (2'')

having a recess (13) corresponding to the tongue, and a second side edge (2''')

extending in a transverse direction to the first side edge and having a form-fitting

elements for locking in a vertical direction with a further panel (bottom paragraph of

page 7 – top of page 8), wherein the form-fitting elements are spaced apart from one

another in the vertical direction and the transverse direction (figures 5, 6, or 7), the

second side edge includes a first step-like milled relief (on edge 2''' of figure 5) starting

from the underside and having essentially vertical inner (21) and outer walls (opposite

21 generally at 23), wherein one of said form-fitting elements (21) is formed on the inner

wall and an other said form-fitting element (23) is formed on the outer wall, and the first

step-like milled relief includes an essentially horizontal head surface with a channel

formed therein (where the underside of the step-like relief is generally horizontal and the

channel is between 21 and the main body of the panel as seen in figure 5).

Regarding claim 6: The floor panel of claim 5, wherein an underside of the tongue has a radius of curvature that is constant over at least 90 degrees (figure 1).

Regarding claim 7: The floor panel according to claim 5, wherein the recess is designed as a groove with a top lip (figure 1) and a bottom lip (14), in which the tongue can be latched in the transverse direction.

Regarding claim 9: The floor panel of claim 5, further comprising a side edge that is located opposite the second side edge having a second step-like milled relief

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(2<sup>IV</sup>) and having spaced apart undercuts (24) which correspond to the form-fitting elements.

Regarding claims 12-13: Palsson discloses the floor panel as in claims 1 and 5 above, wherein walls forming at least a portion the tongue and groove, respectively, are sized and shaped (in that upon examination of the drawings of Palsson the elements appear to have a similar size and shape as applicants claimed/disclosed invention) to form a dust pocket.

### **(10) Response to Argument**

#### **Claims 1 and 3**

Appellants submit that Palsson does not disclose form-fitting elements spaced apart in the transverse and vertical direction on two spaced apart essentially vertical walls. First, appellant's arguments regarding the elements 23 of Palsson not meeting the claimed limitations are moot as they are not the features relied upon to meet the claim. Rather, examiner contends that element 23 constitutes a first form fitting element and element 21 constitutes the second form-fitting element. Appellant argues this stating that element 21 does not lock the panel in the vertical direction.

Examiner disagrees noting that the claim does not recite "lock *the panel*" but rather "for locking in the vertical direction with a further panel", examiner interprets this to mean either the right or left panel is prevented from vertical movement. A review of figure 5 of Palsson shows that clearly element 21 provides a connection preventing the bottom (left) panel from moving vertically upwards (regardless of whether Palsson discloses such a feature, it can clearly be seen from the drawings as element 21 is

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above the left panel it therefore prevents upward vertical movement), and that the elements 23 provide a connection preventing the upper (right) panel from moving in the vertical direction (either up or down, both of which constitute a vertical direction).

Appellant argues that element 21 does not interact with any feature of the other panel to prevent the panel containing element 21 from moving vertically upward.

Examiner notes that vertically upward is not a claimed feature, and further it was never asserted that element 21 performed as such. Element 21 interacts with element 22 of the other panel to prevent the other panel from moving vertically upwards and to prevent the panel containing element 21 from moving vertically downward (where vertical has an upward and a downward direction neither of which is specified by the claim).

Appellant further argues that element 21 is not an essentially vertically oriented wall.

Examiner disagrees noting that there is certainly a vertical component to element 21 and the limitation of essentially certainly does not preclude a wall at an angle. Further it is noted that the angle of element 21 appears to be between 45 and 90 degrees providing for more vertical than horizontal slope to the wall.

#### Claim 4

Appellants submit that Palsson does not disclose an inner wall in which one of the form-fitting elements is arranged stating that element 21 does not constitute both an inner wall and a form fitting element because element 21 is a sloped surface.



Examiner disagrees noting that element 21 being a sloped surface does not preclude it from being an inner wall (as there is no limitation in the claim regarding the orientation of the inner wall) or a form fitting element (especially considering that element 21 interacts in a form fitting way with element 22).

Appellants further submit that is improper for the examiner to use the same element (i.e. element 21) to read on two separate claim features.

Examiner disagrees with this statement regarding the instantly claimed features because the claim does not limit the inner wall and the form fitting element to be two separate elements, but rather states "an inner wall on which one said form fitting element... is arranged". Further an examination of appellant's own drawings depicting the claimed features show a form fitting element formed on the inner wall in much the same way as that of Palsson. Additionally the claim does not provide any structure to the claimed "form fitting element" that would in any way distinguish it from the inner wall.

Appellants submit that Palsson does not disclose undercuts which correspond with the one and other form fitting elements (it is assumed applicant is referring to the undercuts formed on the second step like milled relief and not the undercuts formed on the first step like milled relief). Appellants acknowledge that element 24 constitutes an undercut but that element 22 does not, stating that the term undercut has not been given its plain and ordinary meaning.

Examiner disagrees with this submission and asserts that the term "undercut" has been given its plain and ordinary meaning. Element 22 is a cut formed on the panel 5 (as presented in Palsson, figure 5). When manufacturing the panel and cut it is

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possible that if the panel was "flipped" the element 22 could be an undercut (where the claim does not require that the undercut be in the claimed underside, as presented in claim 1).

Further Appellant presents that the term "undercut" is an action or a result of an action. Therefore if the panel was "flipped" and the cut was performed on the underside (in the flipped condition) and then the panel was again "flipped" back to the original orientation, that would constitute an undercut since the result is a cut formed by cutting away from the underside. It appears that the limitation "undercut" is subject to the orientation and process by which the product was made and does not provide any structural limitations to distinguish over the prior art (note that for the purposes of forming or manufacturing a cut, the underside of the panel is relative to the position and orientation of the panel).

Further appellant's submission that "22 does not function in the same way as the undercut of the claimed invention" is irrelevant as there are no limitations in the claim regarding the function of the "undercut".

Appellants submit that Palsson does not disclose that the "first step like milled relief forms a shoulder which projects in the direction of the underside and has an essentially horizontally oriented head surface... comprising a channel".

Examiner disagrees noting (in figure 5) that element extending above the undercut constitutes a shoulder and that it projects in the direction of the underside (at least the portion bounded by the wall generally at 23 and 21 projects downwardly, thereby creating a shoulder which projects downward). Further the shoulder has an

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essentially horizontal head surface being the horizontal surfaces comprising the underside of the entire shoulder (not just the projecting portion) as seen in figure 5 of Palsson. The horizontal surface has a channel (the space between element 21 and the body of the panel). Appellants submission that the channel as identified by the examiner "is not comprised in an essentially horizontally oriented head surface of a shoulder which projects in a direction of the underside" is not coincident with the claims as claim 4 does not recite such a stated feature, but rather "a shoulder which projects... and has an horizontally oriented head surface... comprising a channel...". These limitations do not require the whole shoulder to project downwards, or for the horizontal head surface to be associated with the portion that does project downwards. Rather from the claim it appears these two features could be separate features in relation to the shoulder and not necessarily structurally related to each other.

#### Claim 12

Appellants submit that it is impossible to determine, from the figures, that the tongue and groove of Palsson (as shown in figures 1) are sized and shaped to form a dust pocket.

Examiner disagrees, noting that it is possible from the drawings to determine that the size and shape of the tongue and groove of Palsson are the same size and shape as those claimed and disclosed by appellant. Considering the manufacturing process and the fact that it is impossible when manufacturing the tongue and groove to get an exact fit (considering different cutting tools with different wear are used for each part and that there, further if they were an exact match it would be virtually impossible to

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insert the tongue into the groove because of the friction force). Additionally there are tolerances for the manufacture of parts such as this and certainly within those tolerances there would be provided a space when the two parts are put together. Considering the size and ability of dust particles to get into extremely small (or large) spaces the gaps caused by manufacturing tolerances would of a size and shape to form a dust pocket. Therefore it is possible to determine and conclude that the tongue and groove of Palsson are sized and shaped to form a dust pocket, regardless of whether Palsson expressly discloses such a feature.

Appellants note that examiners reliance on inherency is improper "...as the structures of the present application and Palsson are not identical or even similar as discussed above...". Examiner maintains that this is an incorrect statement as the presently discussed feature is the tongue and groove (as recited in claim 1), but that Appellant has not at all made any statements or submissions regarding the differences between the appellants tongue and groove and that of Palsson other than to note that it would be impossible to determine from the drawings that a dust pocket was formed. Such a statement is not considered a sufficient discussion to maintain that the tongue and groove of Appellant's invention and that of Palsson are not "identical or even similar". Examiner maintains that they are identical or at least similar (as can clearly be seen by an examination of the drawings) and that the reliance on inherency is proper and has a basis in fact and technical reasoning to support such a reliance. The basis in fact and the technical reasoning being the known technical fact of manufacturing

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tolerances resulting in spaces created between the two imperfectly shaped tongue and groove when connected.

Claims 5-7

Appellants disagree with the rejection and incorporate the arguments presented with respect to claims 1 and 4, which recite the same features and arguments as claims 5-7. Examiner disagrees with appellant's arguments regarding claims 5-7 for the same reasons as presented above with respect to claims 1 and 4 (please reference accordingly).

Claim 9

Appellants submit that the reference numeral 2<sup>IV</sup> of Palsson describes a second edge of the panel and has no milled relief. Examiner used the reference numeral as a general indicator for the side opposite the second side edge (of claim 5) when referencing the figure 5 of Palsson and did not limit the opposite side to be only at 2<sup>IV</sup> but rather the whole side of the panel (including the protrusion portion have element 22). The whole side certainly has a milled relief (considering the elements 24 and those generally at 22).

Claim 13

Appellants submit that it is impossible to determine, from the figures, that the tongue and groove of Palsson (as shown in figures 1) are sized and shaped to form a dust pocket.

Examiner disagrees, noting that it is possible from the drawings to determine that the size and shape of the tongue and groove of Palsson are the same as those claimed

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and disclosed by appellant. Considering the manufacturing process and the fact that it is impossible when manufacturing the tongue and groove to get an exact fit (considering different cutting tools with different wear are used for each part and that there, further if they were an exact match it would be virtually impossible to insert the tongue into the groove because of the friction force). Additionally there are tolerances for the manufacture of parts such as this and certainly within those tolerances there would be provided a space when the two parts are put together. Considering the size and ability of dust particles to get into extremely small (or large) spaces the gaps caused by manufacturing tolerances would form a dust pocket. Therefore it is possible to determine and conclude that the tongue and groove of Palsson are sized and shaped to form a dust pocket, regardless of whether Palsson expressly discloses such a feature.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jessica Laux 

Conferees:

Richard Chilcot 

Meredith Petravick /mcp/

  
RICHARD E. CHILCOT, JR.  
SUPERVISORY PATENT EXAMINER